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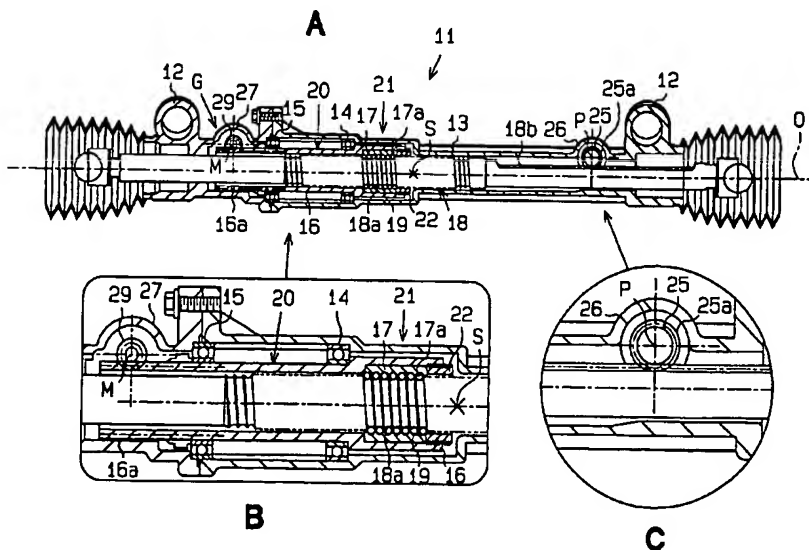
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| (51) 国際特許分類 ⁷⁾ : | B62D 5/04 | (JP). 稻熊 義治 (INAGUMA, Yoshiharu) [JP/JP]; 〒448-8652 愛知県 刈谷市 朝日町 1 丁目 1 番地 豊田工機株式会社内 Aichi (JP). 小林 恒 (KOBAYASHI, Tsune) [JP/JP]; 〒448-8652 愛知県 刈谷市 朝日町 1 丁目 1 番地 豊田工機株式会社内 Aichi (JP). 川幡 信之 (KAWABATA, Nobuyuki) [JP/JP]; 〒448-8652 愛知県 刈谷市 朝日町 1 丁目 1 番地 豊田工機株式会社内 Aichi (JP). 鵜飼 文郎 (UKAI, Fumio) [JP/JP]; 〒448-8652 愛知県 刈谷市 朝日町 1 丁目 1 番地 豊田工機株式会社内 Aichi (JP). |
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| (75) 発明者/出願人 (米国についてのみ): 穂永 進 (HONAGA, Susumu) [JP/JP]; 〒448-8652 愛知県 刈谷市 朝日町 1 丁目 1 番地 豊田工機株式会社内 Aichi | | — 国際調査報告書 |

(54) Title: ELECTRONIC CONTROL POWER STEERING DEVICE

(54) 発明の名称: 電動式パワーステアリング装置



(57) Abstract: An electronic control power steering device (11), comprising a speed reduction mechanism (G) for transmitting the rotation of the rotating shaft (28a) of a motor (28) to a ball screw nut (20) after reducing the speed of the rotation of the rotating shaft, the speed reduction mechanism further comprising a drive gear (29) coaxially connected to the rotating shaft of the motor and a driven gear (16a) formed in the outer surface of the ball screw nut, whereby, by the speed reduction mechanism, the motor can be disposed aslant relative to a rack shaft (18).

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(21)Application number : 11-095011

(71)Applicant : SHOWA CORP

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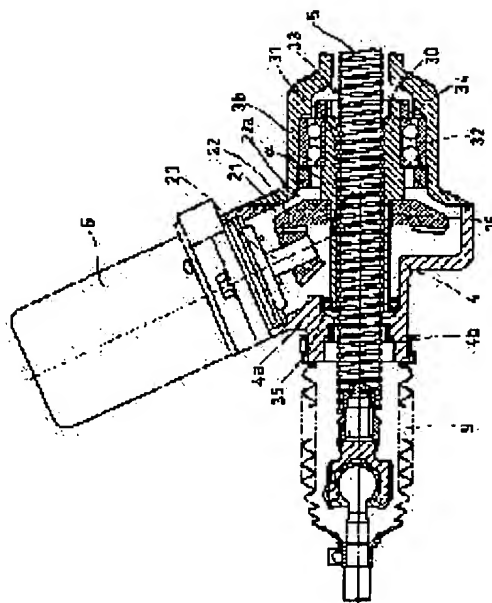
(72)Inventor : OKAMOTO KOICHI

(54) ELECTRIC POWER STEERING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To prevent the transmission of torque applying an excessive force by a simple structure in an electric power steering device.

SOLUTION: This electric power steering device is provided with a rack shaft 5 freely moved according to a steering force, a ball screw mechanism 30 having a ball nut 31, a first gear 21 attached to the output shaft 20 of a electric motor 6, and a second gear 22 engaged with the first gear. The second gear 22 is attached to the outer periphery of the ball nut 31 via a torque limiter 36.



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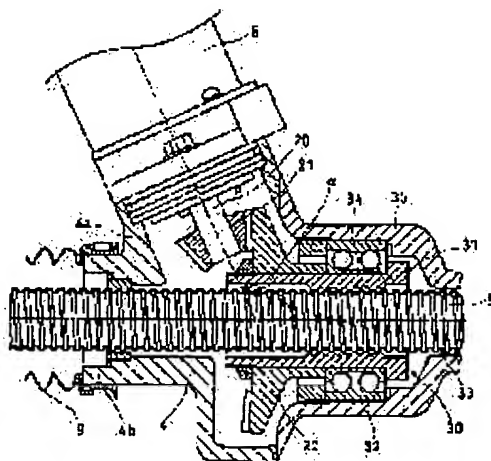
(72)Inventor : OKAMOTO KOICHI
IWASAKI AKIRA

(54) ELECTRIC POWER STEERING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an electric power steering device, wherein the device is made compact, the freedom of laying out is simultaneously increased, and a large reduction ratio is provided.

SOLUTION: This electric power steering device is provided with a rack shaft 5 freely moved according to a steering force, a ball screw mechanism 30 having a ball nut 31 coaxial to the rack shaft 5, a first gear 21 attached to the output shaft 20 of a electric motor 6, and a second gear 22 attached in coaxial relation to the ball nut 31. The axis of the electric motor 6 is disposed to be inclined with respect to the axis of the rack shaft 5, and an engaging portion between the first and second gears 21 and 22 is positioned in the dull angle α side of angle made between the axis of the output shaft 20 and the axis of the rack shaft 5.



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